

From owner-qrp-1@Lehigh.EDU Thu Jun 27 23:03:15 1996
From: David Maliniak <dmalinak@CLASS.ORG>
Subject: [106] Anybody in New Paltz?
Message-ID: <Pine.SUN.3.91.960627132624.15924A-100000@class.class.org>

This is a pretty long shot, but is anybody out there on the list located in close proximity to New Paltz, NY? I'm scouting for field-operating sites near the Mohonk Mountain House, where I'll be staying mid-July.

72 David N2SMH
Glen Rock, NJ

From owner-qrp-1@Lehigh.EDU Thu Jun 27 23:03:15 1996
From: Mike Cloud <cloudm@mhsgate.meth-mem.org>
Subject: [99] ccw
Message-ID: <3A91D23101172C16@mhsgate.meth-mem.org>

Looking for the executables/info for Coherent and/or PCW. tnxs de Mike, KR4IT

From owner-qrp-1@Lehigh.EDU Thu Jun 27 23:03:15 1996
From: "Lau, Zack, KH6CP" <zlau@arrl.org>
Subject: [74] Cheap Microwave Gear
Message-ID: <m0uZHW9-000f4TC@mgate.arrl.org>

Surplus "Gunnplexers" that operate on 10.525 GHz can be quite inexpensive--I've actually seen them for \$5 each--probably should have stocked up but didn't... But, you can get them even cheaper. I have a friend who helped a company that services automatic door openers or burglar alarms by removing the broken units cluttering the shop. He even got some 24 GHz ones.

An article on the topic appeared in the September 1993 QST, pp 68-70. Two minor corrections--the lead photo is of AA5C's SSB rig and a Telurometer is a complete X band transceiver. These days you might want to use a low drop out regulator, like the LM2940T-10.0, instead of the 7810. Not only does it work fine at lower voltage, but is reverse polarity protected.

I tried to work W1RIL on 24 GHz CW during FD, but I think the path got washed out by the rain. We are just about 0.5 mW using mixers, but Ken has already built a 24 GHz preamp. A couple people have gotten PCBs from Germany for VHF/UHF to 24

GHz transverters.

Zack KH6CP/1 8 states on 10 GHz (SSB/CW)

From owner-qrp-1@Lehigh.EDU Thu Jun 27 23:03:15 1996
From: burdick@interval.com (Wayne Burdick)
Subject: [88] Found: Zero Meters QSO mechanism?
Message-ID: <v02130524adf87f60f1eb@[199.170.106.28]>

Turns out there may be internet QSO capabilities already available. Check out the "English page" of Fernando Sia, BV1AL, starting at:

<http://www.isite.net.tw/bv1al/>

He has a link to a company called Tribal Voice that offers "PowWow" software (for the PC platform only--nothing for Mac it appears). You can jump to this page directly at:

<http://www.tribal.com/powwow/download/>

He has another link that appears to not be working that does "QSO via Internet":

<http://www.isite.net.tw/bv1al/powwow:bv1al@tpts1.seed.net.tw>

If anyone tries this or has already, please let me know.

Wayne
N6KR

From owner-qrp-1@Lehigh.EDU Thu Jun 27 23:03:15 1996
From: Jeffrey Hetherington <jhetheri@freenet.npiec.on.ca>
Subject: [64] Heath HA-202A ??????
Message-ID: <Pine.SGI.3.93.960627004726.5325A-100000@freenet.npiec.on.ca>

Hi guys. While rummaging thru the garage yesterday I found a Heathkit shipping box containing a power amp, model HA-202A. The box was addressed to my father and is labeled as an amplifier kit, dated Feb. 5 1982. It is completely built and looks like it has never been used. There were no instructions or paperwork to be seen, and my father does not remember even having it.

Does anybody know what the Heathkit model HA-202A amp is? Any help would be appreciated.

Thanx.

Jeff

=====
L. Jeffrey Hetherington - VA3JFF
Niagara Falls, Ontario, Canada
Canadian QRP Award - <http://www.geocities.com/Colosseum/2572/QRP.html>
VA3JFF TMPS 1996 Qs=020 States=15 Confirmed=05 DX=02
CO CA NY IN SD WI TN GA IL TX DC OH NC SC LA (OZ7 UR4)

From owner-qrp-1@Lehigh.EDU Thu Jun 27 23:03:15 1996
From: "Timothy J Fiebig" <tjfiebig@pau.mobil.com>
Subject: [95] Help
Message-ID: <9605278359.AA835910732@ccmail.pau.mobil.com>

Could someone tell me how to unsubscribe. I will be going away for 10 days and want to temporarily unsubscribe.

Thanks,

Tim/N2BCF

From owner-qrp-1@Lehigh.EDU Thu Jun 27 23:03:15 1996
From: svecbrdk@well.com (Lillian Svec and Wayne Burdick)
Subject: [80] I-net as the Zero Meters band; QRP net & skeds on "0m"; CW over I-net, etc.
Message-ID: <199606271600.JAA17700@mh1.well.com>

[My apologies in advance if someone has proposed all of this before, but here goes....]

I've been thinking lately of the Internet as if it were the newest WARC band, calling it "Zero Meters" or "0m" for lack of a better term. While not grounded in science, it has a nice ring to it :)

The peculiar thing about this new band is that, currently, most QSOs do not take place in real time. (But of course there's a whole lot of QSP (relaying) going on.)

This could easily be remedied. There are any number of live chat sessions about specific topics that occur on-line, in conjunction with a server someplace that provides virtual ports for all the participants. Some of these are called "MUDs", or multi-user domains (or dungeons, depending on your game-playing history). There are also real-time audio communications using systems such as See-U-See-Me or RealAudio. I don't know if anyone has tried CW over Internet, but if not, now is the time!

So, why don't we set up a live QRP chat room that comes on-line at one or two periods during the day? It would be the equivalent of a QRP net. I'm sure someone on QRP-L has had experience using or setting up such a system.

As for "modulation modes," QSOs could be conducted via ASCII text (let's call it modulation mode "N2"), or CW (N1), digitized audio (N3), stills (N4) or even video (N5). Certain variations could append a meaningful suffix. For example, ASCII text e-mail might be considered mode "N2e". Communications that occur as a side-effect of web surfing might be "N2w", etc.

To facilitate both group and individual "QSOs," we could designate multiple "channels." Using net parlance, some participants could "move up" to, say, 0.A, 0.B, 0.C... etc., specific channels on the Zero Meters band. Perhaps one or more of these channels might be designated for specific topics: equipment and design, operating and foxhunts, backpacking and Adventure Radio, etc. One could bounce around in different conversations during the hour or so that the chat room is "on-air."

The ultimate would be to freely be able to move among modulation modes. One can imagine this as a great way for no-code techs to learn CW, and for the rest of us to brush up. When using CW, each operator should be able to modify the pitch of their CW tone so that we'd benefit from the same affordances of on-air CW. You could of course even design your own attack and decay: how about a nice bell-like tone?

We could even learn a few of the "QN?"-type Q signals that are used on CW networks, as well as invent a few of our own. This could end up being the most disciplined chat room in internet history!

To keep the 0m band from becoming yet another addictive MUD, I really like the idea of setting up specific days and/or times where the chat room is available. If we don't turn it off at other times, we might find ourselves using 0m exclusively. :o(

Wouldn't it be fun to be able to jump into the 0m QRP net and talk in real-time with friends and acquaintances from QRP-L? To make QSOs on zero meters? To Work All States on this new band? To make the I-net Honor

Roll?

I'd be interested in your feedback about this idea. If someone has done it already, let us know how we can participate.

72,
Wayne
N6KR

From owner-qrp-1@Lehigh.EDU Thu Jun 27 23:03:15 1996
From: Art Winterbauer <art@comet.ucar.edu>
Subject: [102] Index QRP+ on RTTY
Message-ID: <Pine.SUN.3.93.960627131611.3969D-100000@spike>

Has anyone successfully used their QRP+ on RTTY? I'd be interested in their experiences.

Art
N00QS

From owner-qrp-1@Lehigh.EDU Thu Jun 27 23:03:15 1996
From: cooper@gmpvt.com (Tom Cooper)
Subject: [100] Johnson Matchbox manual needed
Message-ID: <199606271919.PAA06340@web.gmpvt.com>

A Johnson Matchbox (small one) followed me home from a recent hamfest. I've often heard that they are very efficient and that's what I want, low losses.

Anyway, I did not get a manual with the unit and, although I can probably not hurt the thing with my Argo 509, it would be nice to have. If you have one and can make a photo copy, please let me know so I can send some postage money.

Thanks and 72/73,

Tom WA1GUV
cooper@gmpvt.com

From owner-qrp-1@Lehigh.EDU Thu Jun 27 23:03:15 1996
From: rxd7@rabbit.INS.CWRU.Edu
Subject: [87] Micronaut SMP.
Message-ID: <199606271720.NAA24864@hunny.INS.CWRU.Edu>

Hi Gang,

Just got off the phone with Sescom, the company that kits Dave Ingram's "Micronaught" SMP transmitter. Sescom told me they have sold all the kits and do not plan to kit more.

Does anyone in the group know of other SMP kits as I would like to try my hand at constructing one ?

Thanks, Dick, WD8ISB

From owner-qrp-1@Lehigh.EDU Thu Jun 27 23:03:15 1996
From: torell@sicom.com (Kent Torell)
Subject: [105] propagation forcast
Message-ID: <v02130502adf89880357d@[192.91.202.41]>

Another quiet week is forcast. No expected storms, solar flux running at 70. (This is getting embarrassing...but then, the forcast for Phoenix is pretty constant also...hot and sunny ;-) Should be another good week. 'Course, sporadic E can also work to keep your signals from getting to the F layer, and limit your distance. I think that may be some of the 'lousy propagation' we observe at times...

Kent Torell torell@sicom.com 602-483-2867 x40
SICOM 7585 E. Redfield, #202 Scottsdale, AZ 85260
AB70A Tmps 1996 Qs=010 States=09 Confirmed=01 DX=00
AK AZ CO HI KS OK OR TX WA

From owner-qrp-1@Lehigh.EDU Thu Jun 27 23:03:15 1996
From: John D Young <jdy@whitney.ufl.edu>
Subject: [98] Q-meter
Message-ID: <Pine.LNX.3.91.960627150217.25451A-1000000@whitney.ufl.edu>

All

I picked up an old Heath Q-meter at a ham fest for \$3. At that price I was saving it from the landfill. Having never used a Q-meter I played with it for a few hours and traced the basic circuit but still have no idea how to use it.

A copy of the manual or other information or references on Q-meters would be appreciated.

As always I will cover any copy and mail cost.

72 John
WA8KNE

From owner-qrp-1@Lehigh.EDU Thu Jun 27 23:03:15 1996
From: Dick Schneider <74602.3317@compuserve.com>
Subject: [96] QRP EQUIP DIRECTORY STILL AVAILABLE
Message-ID: <960627182506_74602.3317_EHH70-1@CompuServe.COM>

From owner-qrp-1@Lehigh.EDU Thu Jun 27 23:03:15 1996
From: mark.milburn@cshl.com (MARK MILBURN)
Subject: [65] qrp rigs
Message-ID: <8C341F7.000A0058AF.uuout@cshl.com>

I am starting to get interested in qrp...wonder if you would care to give me some info on organizations, including benefits and costs, and thoughts on some equipment. I am not a builder, so I suspect I would want some kind of xcvr....and don't think I would like the VERY low power because my location would make it such a challenge I might lose interest. I am on a city lot and would have to make some compromises on antenna length.

What are your thoughts?

Thanks for sharing your ideas.

73 Mark

Mark Milburn, KQ0I
KQ0I @ W0AK.#CIA.IA.USA.NOAM

Des Moines, Iowa (Polk County)
e-mail mark.milburn@cshl.com

From owner-qrp-1@Lehigh.EDU Thu Jun 27 23:03:15 1996

From: Bigbob97@aol.com
Subject: [111] QRPp
Message-ID: <960627225410_423335875@emout07.mail.aol.com>

Is everyone still waiting for QRPp or am I the only one? I know there has been a delay but I haven't seen anything posted lately.

73,
Bob WB2DHK

From owner-qrp-1@Lehigh.EDU Thu Jun 27 23:03:15 1996
From: Nick Franco <kf2ph@bnl.gov>
Subject: [72] QSK and Clicking
Message-ID: <31D28FD0.796@bnl.gov>

Gang,

Dave asked:

My question:

Which is more harmful to the rig, to have the relay delay set to minimum for a click-click-click upon every character, or is setting the delay to (almost) maximum worse where it stays engaged for a minute or two.

Does either case make a difference?

I have an Icom 728 with the same condition. Please post the answer to the whole group or at least copy me on the reply if you don't mind.

thanks
Nick

KF2PH TMPS 1996 Qs=036 States=12 Confirmed=10 DX=06

--

Nicholas J. Franco <>> BROOKHAVEN NATIONAL LABORATORY
Sr. Systems Specialist RHIC Project - Building 1005 - Room 201
Tel: (516) 344-5467 Fax: (516) 344-3674 UPTON, N.Y. 11973-5000
Email: kf2ph@bnl.gov <http://www.rhichome.bnl.gov/People/franco>

From owner-qrp-1@Lehigh.EDU Thu Jun 27 23:03:15 1996
From: "David Kreinberg" <kreinbd@ccgate.dl.nec.com>

Subject: [69] QSK QUESTION

Message-ID: <9605278358.AA835887598@smtpgw.ccgate.dl.nec.com>

Gang:

Have a question about QSK. My rig (Yaesu 840) does not have silky QSK like Ten Tec's or OHR's. Uses relay for T/R switching.

For casual Q's, I like to set the relay delay high, so that the relay stays engaged throughout the Q and doesn't release until I stop sending. I find the click-click relay chatter annoying, except in a contest where quick response is a must.

My question:

Which is more harmful to the rig, to have the relay delay set to minimum for a click-click-click upon every character, or is setting the delay to (almost) maximum worse where it stays engaged for a minute or two.

Does either case make a difference?

Thanks for any opinions/comments.

73 de Dave AC5GY

AC5GY Tmps 1996 Qs=004 States=04 Confirmed=01 DX=00

ME TX FL SC NC

From owner-qrp-1@Lehigh.EDU Thu Jun 27 23:03:15 1996

From: bob.roach@sourcebbs.com (BOB ROACH)

Subject: [82] Reciever Advice

Message-ID: <8C352CF.000103B9E0.uuout@sourcebbs.com>

Hello All,

I would like your thoughts on recievers for a QRP station. The plan at this point is to use a small very low power transmitter, therefore I want a good reciever to help take up the slack. I need something that runs on 12V and would like to have a superhet rig. Looks easy so far, but I also have very little money to spend and probably will not have time to build a homebrew rig although this is not out of the question.

TNX for INPUT

73 de KE4QOK

Bob

* SLMR 2.1a * bob.roach@sourcebbs.com KE4Q0K@K4VJB.VA.USA.NOAM

This message originated from: ----- Selective Source BBS
----- Virginia Beach, Virginia
----- (804) 471 6776

From owner-qrp-1@Lehigh.EDU Thu Jun 27 23:03:15 1996
From: James Bell <jim.bell@canada.cdev.com>
Subject: [70] Rick N3QEN 40m antenna
Message-ID: <199606271330.JAA28443@nss2.CC.Lehigh.EDU>

Rick,

I didn't get your return address.

Consider the antenna to be like a large upside down Y with the two legs close together.

You are going to feed on one leg and ground the other to the building flashing.

So the co-ax center goes to the one leg that you feed and the coax BRAID GETS CONNECTED ALONG WITH THE OTHER LEG TO the flashing.

The antenna doesn't have to extend straight up and in your case I would consider extending the end away from the building in a horizontal fashion or as you suggested up another 10 feet.

It is good practice to try and get the antenna at right angles to the flashing.

You will probably have to prune the antenna extension wire for lowest swr or use a tuner.

I hope this clarifies your installation

72

Jim VE3DDY

From owner-qrp-1@Lehigh.EDU Thu Jun 27 23:03:15 1996
From: ROBERT PALAMBO <palambo@infowest.com>
Subject: [108] Ten-Tec antenna tuner
Message-ID: <01BB6484.7C4E7D80@Chakotay.infowest.com>

Anyone who has or knows who may have a Ten-Tec tuner model AC5 for the =

Argonaut 509 for sale please post or send e-mail

Thanks =

Bob K9ZWH

=

palambo@infowest.com

From owner-qrp-1@Lehigh.EDU Thu Jun 27 23:03:15 1996
From: "Frank" <g3ycc@enterprise.net>
Subject: [84] Wanted - your rig info!
Message-ID: <199606271814.SAA24916@mail.enterprise.net>

Thanks for reading this.

If you have built anything, either from a kit or a published design and have a GIF/JPG etc picture/s of your work, please read on...

I would like to add some pages on my QRP Web Site of home brew work.

Please email to me if you would like something you have made included. I would need details of the rig, pictures preferably and results with it.

Thanks and look forward to hearing from you.

--

Frank G3YCC

Ham Radio QRP Web Page:

<http://homepages.enterprise.net/g3ycc/>

From owner-qrp-1@Lehigh.EDU Thu Jun 27 23:03:15 1996
From: "Frank" <g3ycc@enterprise.net>
Subject: [89] Wanted HW7 pic
Message-ID: <199606271856.SAA29123@mail.enterprise.net>

Thanks for reading this.

Anyone have an idea where on the net I can find a picture of the old HW7. If you have one, I would appreciate a GIF/JPEG etc. Also a brief spec on the rig. For my web page, of course.

Bye.

--

Frank G3YCC

Ham Radio QRP Web Page:

<http://homepages.enterprise.net/g3ycc/>

From owner-qrp-1@Lehigh.EDU Thu Jun 27 23:03:15 1996
From: Jerry Parker <jparker@fix.net>
Subject: [94] Zuni Loop Field Day Pictures and Captions
Message-ID: <2.2.32.19960627174008.00762790@fix.net>

The initial Zuni Loop Field Day Pictures and Captions are available off the NorCal Page:

<http://www.fix.net/~jparker/norcal.html>

72,,,Jerry...WA6OWR...K

From owner-qrp-1@Lehigh.EDU Thu Jun 27 23:03:15 1996
From: garyb@osha.igs.net (by way of Jerry Parker <jparker@fix.net>)
Subject: [79] Re: Field Day Reports
Message-ID: <2.2.32.19960627150948.008235d0@fix.net>

Hi Jerry, here is a brief report about the Durham Region QRP Club, VE3QDR effort for F.D. Weather didn't cooperate Saturday morning, torrential rain and a mini twister that uprooted some trees in the area and along with a couple of our operating tents. Managed to get one station up and running by 10am to copy the bulletin and from then on things went reasonably well, even sol blessed us with his presence and shone for the rest of the weekend. 3 cw stations and 1 ssb station up and running.

80 meters	172 cw and 31 ssb qso's
40 "	189 cw and 41 ssb qso's
20 "	124 cw and 26 ssb qso's
15 "	60 cw and 51 ssb qso's

2 mtr.fm. 16 qso's, also satellite and packet. With the bonus points our score will be around 7340 pts. below our '95 total but a great time was had by all. Nothing fancy in the antenna dept. v beams, a horizontal loop, bow tie and inverted v for hf. We had 5 cw ops and 7 loggers and ssb ops for 12 in total. The "great cw operator hunt" will continue!

72
Gary VE3REP

From owner-qrp-1@Lehigh.EDU Thu Jun 27 23:03:15 1996

From: Gary Surrency <gsurrenc@ix.netcom.com>
Subject: [90] Re: Heath HA-202A ??????
Message-ID: <31D2C815.7EF7@ix.netcom.com>

Jeffrey Hetherington wrote:

>
> Hi guys. While rummaging thru the garage yesterday I found a Heathkit
> shipping box containing a power amp, model HA-202A. The box was addressed
> to my father and is labeled as an amplifier kit, dated Feb. 5 1982. It is
> completely built and looks like it has never been used. There were no
> instructions or paperwork to be seen, and my father does not remember even
> having it.
>
> Does anybody know what the Heathkit model HA-202A amp is? Any help
> would be appreciated.
>
> Thanx.
> Jeff
>
> =====
> L. Jeffrey Hetherington - VA3JFF
> Niagara Falls, Ontario, Canada
> Canadian QRP Award - <http://www.geocities.com/Colosseum/2572/QRP.html>
> VA3JFF TMPS 1996 Qs=020 States=15 Confirmed=05 DX=02
> CO CA NY IN SD WI TN GA IL TX DC OH NC SC LA (OZ7 UR4)

It's a 2 meter amplifier and has 20w out for 5x in, 30w for 7.5w in, 40w out at 10w in, and 50w out for 15 in. A very nice "brick" for 2 meters. Requires 12-16 VDC at 7 amps maximum. It was sold from 1978 to 1984 for \$79.95.

This info was taken from the book, "HEATHKIT, A Guide to the Amateur Radio Products", from Electric Radio Press, copyright 1995 by Chuck Penson WA7ZZE. It is an excellent book on Heath gear.

72/73
-Gary AB7MY

From owner-qrp-1@Lehigh.EDU Thu Jun 27 23:03:15 1996
From: "Jim Markle" <jim_markle@corp.disney.com>
Subject: [101] Re: Help
Message-ID: <9605278359.AA835902974@ccsmtpcorpout.corp.disney.com>

To subscribe: Send mail to listserv@lehigh.edu with text (not subject): subscribe QRP-L Firstname Lastname Callsign
To post: Send mail to QRP-L@lehigh.edu
See also the [The QRP-L Resource Page](#).

Notice it says "listserv@...." not "qrp-l@....."

Check out: <http://www.cc.columbia.edu/~fuat/cuarc/mailling-lists.html>

later, kb5ob
van nuys, ca

----- Reply Separator -----

Subject: Help
Author: tjfiebig@pau.mobil.com at CORP-INTERNET-BURBANK
From owner-qrp-l@Lehigh.EDU Thu Jun 27 23:03:15 1996
From: "'AB7HI' Stephen Lee" <slee@u.washington.edu>
Subject: [107] Re: Index QRP+ on RTTY
Message-ID: <Pine.A32.3.92a.960627131812.118411A-1000000@homer23.u.washington.edu>

KV9X, kilo victor niner xray, Brian, was running RTTY this past Field Day on my QRP+ (S/N:655) using HamCom software. It was necessary to ask another station in our group, (the NW-QRP Club) to cease transmission while we received the ARRL bulletin. This was my first time participating in a Field Day so I was mostly observing the goings-on. As I recall, there were 3 QRP+'s being used and 2 Icom 706's.

Bill, N7MFB, did a remarkable job of planning this great adventure. Brian kept us all up to date on the digital scene in between working the HF bands. I think truly half of us were new faces in the NW-QRP Club roster. I looked at the NW-QRP web page so here's the URL for that:

<http://www/scn.org/IP/nwqrp/nwqrp.html>

There's also an email address: nwqrp@scn.org
I think one could reach Brian, KV9X, at that address and possibly get more information on using the QRP+ for RTTY.

Enjoy!
Stephen Lee, AB7HI
slee@u.washington.edu

On Thu, 27 Jun 1996, Art Winterbauer wrote:

>
> Has anyone successfully used their QRP+ on RTTY? I'd be interested in
> their experiences.
>
> Art
> N00QS
>
>
>
>

From owner-qrp-1@Lehigh.EDU Thu Jun 27 23:03:15 1996
From: john andrews <jm165723@eee.org>
Subject: [104] Re: Johnson Matchbox manual needed
Message-ID: <31D2E535.172C@eee.org>

Tom Cooper wrote:

>
> A Johnson Matchbox (small one) followed me home from a recent hamfest. I've
> often heard that they are very efficient and that's what I want, low losses.
>
> Anyway, I did not get a manual with the unit and, although I can probably
> not hurt the thing with my Argo 509, it would be nice to have. If you have one
> and can make a photo copy, please let me know so I can send some postage money.
>
> Thanks and 72/73,
>
> Tom WA1GUV
> cooper@gmpvt.com

Hi Tom:

A schematic and a few tips showed up in "73" mag. within the last
6 months(?) can't remember- trying to sell off my junk-box and
everything is in chaos.

IF you can't find an issue, E-mail me in about 4-5 weeks(BIG
JUNKBOX) and I will try to find you a copy.

72, John- N5INZ

From owner-qrp-1@Lehigh.EDU Thu Jun 27 23:03:15 1996
From: "Kerry W. Miller" <kmiller@flash.net>
Subject: [66] Re: K5F0/5 FD QRP Report
Message-ID: <2.2.32.19960627110624.006846b4@pop.flash.net>

At 05:27 PM 6/26/96 -0400, you wrote:

>In a message dated 96-06-26 17:08:05 EDT, you write:

>

><< At 08:57 PM 6/26/96 GMT, you wrote:

> >K5F0 was seen to have picked up the

> >mike and actually used it correctly and even was successful in making
>contacts.

> >:-)

> >

>

> Whooooaa! Someone put up a monument for this historic moment :^)

> >>

>

>

>Photos! I gotta see photos. Ed

Whatsa' mike?

Kerry "CW Forever" Miller

WD5ABC

From owner-qrp-1@Lehigh.EDU Thu Jun 27 23:03:15 1996
From: JEVERHART@cayman.vf.mmc.com
Subject: [68] Re: K5F0/5 FD QRP Report
Message-ID: <960627091332.2525c6a4@carib.vf.mmc.com>

Chuck you wrote:

>K5F0 was seen to have picked up the

>mike and actually used it correctly and even was successful in making contacts.

>:-)

>

I hope at least you spoke at more than 60 wpm!

72/73,

Joe E., N2CX

From owner-qrp-1@Lehigh.EDU Thu Jun 27 23:03:15 1996
From: jgann@mindspring.com (Alvin G. Gann)
Subject: [77] Re: K5F0/5 FD QRP Report
Message-ID: <199606271431.KAA13457@borg.mindspring.com>

>At 05:27 PM 6/26/96 -0400, you wrote:
>>In a message dated 96-06-26 17:08:05 EDT, you write:
>>
>><< At 08:57 PM 6/26/96 GMT, you wrote:
>> >K5F0 was seen to have picked up the
>> >mike and actually used it correctly and even was successful in making
>>contacts.
>> >:-)
>>>>>
>
>Whatsa' mike?
>Kerry "CW Forever" Miller
>WD5ABC
>
I think it's a unit for measuring capacitors used in audio filters. :-) 72
--Jerry W1UI

From owner-qrp-1@Lehigh.EDU Thu Jun 27 23:03:15 1996
From: Art Searle <asearle@netusa.net>
Subject: [109] Re: Lima mini-straight-key
Message-ID: <31D35BFE.20CF@netusa.net>

Steve Slavsky wrote:
>
> Art-
>
> Could you describe the key a bit?

Description of Lima Electronics mini-straight key:

The base is a black plastic 3" by 1 1/2" and 1/4" thick. It looks like a very durable modern plastic. It has very shallow rubber feet glued on the bottom. The glue had distorted the rubber and I had to file them to get the key to lay flat. All of the key's hardware is stainless steel (I think). There are burrs on the edges of the hardware but that is only cosmetic as the key seems very smooth. There are 2

adjustment on the key, one for contact height that has a lock riing and one for spring tension that doesn't. The knob is 1" in diameter. This mini-key has a hood covering all but the knob. The hood slides into grooves on both sides of the base. In the middle of the hood is the male half of a snap. I suppose this is to attach a strap (not supplied) to attach it to your knee. The key works as well as any key I own and it's small size doesn't make it unstable. I placed this order sight unseen and had no idea what I was getting. I've been burned with other blind purchases but I like this key and it took less than a month to get from South Africa.

Contact: Marc, ZS6HZ, Lima Electronics, PO Box 707, Bergvlei, 2012, Republic of South Africa
phone: 27-11-444-0444 fac:27-11-444-0459

Price when I got mine was \$25 plus \$3 shippint.
VISA or MC or bank draft (check)

72, de Art WU2K

--

72,73, de Art Searle, WU2K, Long Is., NY, ARRL Life Member
QRP-L #524, QRP ARCI #9123, NorCal pending, DXCC MX & CW HR
NRA Benefactor Life Member, NMLRA Life Member, AMA Life Member
NRA Certified Firearms Instructor, Dale Earnhardt Fan Club

From owner-qrp-l@Lehigh.EDU Thu Jun 27 23:03:15 1996
From: Paul Erickson <paul1@wizard.ucs.sfu.ca>
Subject: [110] Re: Lima mini-straight-key
Message-ID: <9606280252.AA05527@wizard.ucs.sfu.ca>

>
> Steve Slavsky wrote:
> >
> > Art-
> >
> > Could you describe the key a bit?
>
> Description of Lima Electronics mini-straight key:
>
> The base is a black plastic 3" by 1 1/2" and 1/4"
> thick. It looks like a very durable modern plastic.

> It has very shallow rubber feet glued on the bottom.
> The glue had distorted the rubber and I had to file
> them to get the key to lay flat. All of the key's
> hardware is stainless steel (I think). There are
> burrs on the edges of the hardware but that is only
> cosmetic as the key seems very smooth. There are 2
> adjustment on the key, one for contact height that
> has a lock riing and one for spring tension that
> doesn't. The knob is 1" in diameter. This mini-key
> has a hood covering all but the knob. The hood
> slides into grooves on both sides of the base.
> In the middle of the hood is the male half of a
> snap. I suppose this is to attach a strap (not
> supplied) to attach it to your knee. The key works
> as well as any key I own and it's small size
> doesn't make it unstable. I placed this order
> sight unseen and had no idea what I was getting.
> I've been burned with other blind purchases but I
> like this key and it took less than a month to get
> from South Africa.
>
> Contact: Marc, ZS6HZ, Lima Electronics, PO Box 707, Bergvlei, 2012,
> Republic of South Africa
> phone: 27-11-444-0444 fac:27-11-444-0459
>
> Price when I got mine was \$25 plus \$3 shippint.
> VISA or MC or bank draft (check)
>

When I bought mine a few weeks ago, the price was \$20 + \$3 shipping (U.S.)

> 72, de Art WU2K
>
> --
> 72,73, de Art Searle, WU2K, Long Is., NY, ARRL Life Member
> QRP-L #524, QRP ARCI #9123, NorCal pending, DXCC MX & CW HR
> NRA Benefactor Life Member, NMLRA Life Member, AMA Life Member
> NRA Certified Firearms Instructor, Dale Earnhardt Fan Club
>
>
cheers, Paul
ve7cqk
email: paul11@wizard.ucs.sfu.ca

From owner-qrp-1@Lehigh.EDU Thu Jun 27 23:03:15 1996

From: Bob Hightower <ki7mn@dancris.com>
Subject: [81] Re: qrp rigs
Message-ID: <199606271605.JAA25103@dancris.com>

At 08:23 AM 6/26/96 -0600, you wrote:

>I am starting to get interested in qrp...wonder if you would care to
>give me some info on organizations, including benefits and costs,
>and thoughts on some equipment. I am not a builder, so I suspect I
>would want some kind of xcvr....and don't think I would like the
>VERY low power because my location would make it such a challenge
>I might lose interest. I am on a city lot and would have to make
>some compromises on antenna length.
>What are your thoughts?

>

My choice, even though you said you're not a builder, would be a NorCal 40A.
If you can find someone who will part with one already built, great, but
they are easy to build and extremely good performers. Seems to be the
'standard' for low-power, dependable single banders around here.

From owner-qrp-l@Lehigh.EDU Thu Jun 27 23:03:15 1996
From: Kevin Muenzler <muenzlerk@uthscsa.edu>
Subject: [71] RE: QSK QUESTION
Message-ID: <01BB6403.4A0A7760@muenzlerk.uthscsa.edu>

On Thursday, June 27, 1996 3:24 AM, David
Kreinberg[SMTP:kreinbd@ccgate.dl.nec.com] wrote:

>

> Gang:

>

> Have a question about QSK. My rig (Yaesu 840) does
> not have silky QSK like Ten Tec's or OHR's. Uses relay
> for T/R switching.

>

> For casual Q's, I like to set the relay delay high, so
> that the relay stays engaged throughout the Q and doesn't
> release until I stop sending. I find the click-click relay
> chatter annoying, except in a contest where quick response
> is a must.

>

> My question:

> Which is more harmful to the rig, to have the relay delay
> set to minimum for a click-click-click upon every character,
> or is setting the delay to (almost) maximum worse where it
> stays engaged for a minute or two.

> Does either case make a difference?

>
> Thanks for any opinions/comments.
>
> 73 de Dave AC5GY
> AC5GY Tmps 1996 Qs=004 States=04 Confirmed=01 DX=00
> ME TX FL SC NC
>
>
>

I have the FT-890. The relay on this rig is pretty quiet. However, I do find it irritating to have the audio come back in between characters. What I do is key the microphone for as long as I am sending. This keeps the rig in transmit mode. When you are done sending release the mic.

Kevin, WB5RUE

From owner-qrp-l@Lehigh.EDU Thu Jun 27 23:03:15 1996
From: Scott Rosenfeld NF3I <ham@w3eax.umd.edu>
Subject: [73] RE: QSK QUESTION
Message-ID: <Pine.3.89.9606270833.A7160-01000000@w3eax.umd.edu>

I have an Alinco DX-70T and the relay clacks (albeit quietly). You can set the QSK from any of SEVEN delays or to full QSK. I choose a short but finite delay and, while I really do prefer full QSK, I'd rather just keep the rig in XMIT.

My Argo, OMNI V, and Explorer II have beautiful electronic QSK.

* Scott Rosenfeld NF3I Burtonsville, MD FM19 QRV 80-10/6/2/440 *
*** 6m 64 grids worked on 8 watts ** HF 138 cfmd * QRP-L #147 ***
** QRP ARCI #9054 ** DXCC/WAS/WAC ** 100% dipole powered HF/6m **
* 301-549-1022 h / 301-982-1015 w * 145.490- 147.225+ PL 156.7 *

From owner-qrp-l@Lehigh.EDU Thu Jun 27 23:03:15 1996
From: "Paul R. Valko" <prvalko@Oakland.edu>
Subject: [76] RE: QSK QUESTION
Message-ID: <Pine.OSF.3.91.960627100834.20785B-1000000@saturn.acs.oakland.edu>

On Thu, 27 Jun 1996, Kevin Muenzler wrote:

> I have the FT-890. The relay on this rig is pretty quiet. However, I
> do find it irritating to have the audio come back in between characters.

That is TOO funny. Different strokes... right? People like me that almost REQUIRE full QSK find non-QSK rigs (ones that don't let you hear between dits and dahs) completely irritating! It may have a LOT to do with how we were introduced to CW. I built an HW-16 in 1975 so I "grew up" with full QSK. I built an HW-101 when I upgraded to General in 1977, then treated myself to a Ten Tec Triton IV upon getting my Advanced.

When I first touched the keyer on the Ten*Tec, I knew immediately that, "This is the way it's supposed to be!" Of course, the HW-101 did not have full QSK.

73 =paul= wb8zjl

ObQRP - I got to visit the world's largest QRP Field Day effort this weekend in Romeo Michigan. USECA's 16A FD was quite a site to see! I think they learned a lot this year as it was their first QRP attempt. The problem I saw was that many of the bands SHOULD have been using yagis but instead had dipoles and other wire antennas! Running 6M SSB on a 1/4 wave vertical??? C'mon, 6M is S0000ooooo simple to build on, they could have had a 5el homemade beam!

ObRig_Blow_n_up - I managed to pop something in my FT-900at while driving around to all the various FD sites last weekend :-(I have an S9 "white noise" on top of all signals between 1.800 MHz and 14.49999 Mhz. Think it is something either in the passband filter or PLL oscillator. The \$28 service manual should arrive at home any day now. bummer.

ObWhine - Sure is a *%&#* to try and work on a rig without voltage charts, makes me REALLY appreciate Ten*Tec's owners manuals, compared to the japanese "operators manuals!"

From owner-qrp-l@Lehigh.EDU Thu Jun 27 23:03:15 1996
From: Kevin Muenzler <muenzlerk@uthscsa.edu>
Subject: [78] RE: QSK QUESTION
Message-ID: <01BB640E.6D993EE0@muenzlerk.uthscsa.edu>

On Thursday, June 27, 1996 5:27 AM, Paul R. Valko[SMTP:prvalko@Oakland.edu] wrote:
>

>On Thu, 27 Jun 1996, Kevin Muenzler wrote:

>
>> I have the FT-890. The relay on this rig is pretty quiet. However, I
>> do find it irritating to have the audio come back in between characters.
>
>That is TOO funny. Different strokes... right? People like me that
>almost REQUIRE full QSK find non-QSK rigs (ones that don't let you hear
>between dits and dahs) completely irritating! It may have a LOT to do with how
>we were introduced to CW. I built an HW-16 in 1975 so I "grew up"
>with full QSK. I built an HW-101 when I upgraded to General in 1977, then
>treated myself to a Ten Tec Triton IV upon getting my Advanced.
>
I build an HW-16 and HW-101. I don't remember the HW-16 being QSK but then that
was a LONG
time ago. {:) It was vaporized by a lightning stroke. {:) On a quiet band QSK
doesn't bother me but on
something like 40 or 80 I get distracted.

Kevin, WB5RUE

You are a redneck if:

You think "loading the dishwasher" means getting your wife drunk

You may be a redneck if:

You have a very special baseball cap, just for formal occasions.

From owner-qrp-l@Lehigh.EDU Thu Jun 27 23:03:15 1996

From: Art Searle <asearle@netusa.net>

Subject: [83] Re: QSK QUESTION

Message-ID: <31D2E79F.5FA8@netusa.net>

Hi Gang,

Paul R. Valko wrote:

> That is TOO funny. Different strokes... right? People like me that
> almost REQUIRE full QSK find non-QSK rigs (ones that don't let you hear
> between dits and dahs) completely irritating!

I agree with Paul, if it ain't a QSK rig, I don't want it. I think it's
very easy to get used to (and listen to) that "noise" between your own
sending. That's my advice to anyone new to cw who plans to stick with it.
Get used to the "noise". That "noise" is full of valuable information
whether you're chasing DX or rag chewing. Is someone else calling the
same station you are? (especially important for QRP) Is the station you
are talking to trying to break back? Is someone interfering? Lots of
other reasons. I even go a step further and turn down the sidetone to
a much lower level.

72, de Art WU2K

--

72,73, de Art Searle, WU2K, Long Is., NY, ARRL Life Member
QRP-L #524, QRP ARCI #9123, NorCal pending, DXCC MX & CW HR
NRA Benefactor Life Member, NMLRA Life Member, AMA Life Member
NRA Certified Firearms Instructor, Dale Earnhardt Fan Club

From owner-qrp-1@Lehigh.EDU Thu Jun 27 23:03:15 1996
From: "Dana H. Myers" <myers@bigboy.West.Sun.COM>
Subject: [85] Re: QSK QUESTION
Message-ID: <Roam.3.0.835895504.25802.myers@bigboy>

> Hi Gang,
>
> Paul R. Valko wrote:
> > That is TOO funny. Different strokes... right? People like me that
> > almost REQUIRE full QSK find non-QSK rigs (ones that don't let you hear
> > between dits and dahs) completely irritating!

>
Art wrote:

> I agree with Paul, if it ain't a QSK rig, I don't want it. I think it's
> very easy to get used to (and listen to) that "noise" between your own
> sending. That's my advice to anyone new to cw who plans to stick with it.
> Get used to the "noise". That "noise" is full of valuable information
> whether you're chasing DX or rag chewing. Is someone else calling the
> same station you are? (especially important for QRP) Is the station you
> are talking to trying to break back? Is someone interfering? Lots of
> other reasons. I even go a step further and turn down the sidetone to
> a much lower level.

I turned down the sidetone level on my FT-747 and also reduced the
hang delay to the minimum, getting semi-QSK... it's pretty good, for
all the reasons Art wrote. Full QSK would be even nicer... ;-)

Dana KK6JQ
Dana@Source.Net

From owner-qrp-1@Lehigh.EDU Thu Jun 27 23:03:15 1996
From: N5EM@aol.com
Subject: [92] Re: QSK QUESTION
Message-ID: <960627141702_565361293@emout14.mail.aol.com>

In a message dated 96-06-27 11:02:30 EDT, you write:

<< My question:

Which is more harmful to the rig, to have the relay delay set to minimum for a click-click-click upon every character, or is setting the delay to (almost) maximum worse where it stays engaged for a minute or two.
Does either case make a difference?

Thanks for any opinions/comments.

>>

Relays, switches and other electromechanical devices are rated to a certain number of operations or cycles. Having the relay operate on every CW element, rather than after a whole sentence or transmission will shorten the life of the device. Now, if that shortens it from 10 years to 8 years, you probably don't care. But, we don't know the rated number of operations before failure so we really don't know how long that T/R relay will last in either setting. Personally, I agree with you. I can't stand the clickety-click and set it to drop after 2 or 3 seconds.

Ed, N5EM

From owner-qrp-1@Lehigh.EDU Thu Jun 27 23:03:15 1996
From: N9DD@aol.com
Subject: [93] Re: QSK QUESTION
Message-ID: <960627141936_565364105@emout18.mail.aol.com>

Dave has received many replies to his question on which was better for the rig - short delay timing to imitate full break-in as much as possible, or leaving the delay real long so the relay is closed for several minutes at a time. But no one is answering his question!

Since having the relay closed for the full transmission would eliminate wear and tear on the relay itself (a common failure item), I would think it would be best to go with the long delay. True, there might be higher voltage applied to drivers and finals for a higher percentage of the time this way, but I think it would be easier on many components to keep them at a more stable state, electrically speaking, than to have levels constantly jumping up and down.

Yes, I prefer full break-in too. That's why I would look for that feature in any transceiver I might buy in the future.

73,

Tom Frisz N9DD QRP-L #32
South Bend, IN
Member of: QRP-ARCI, CQC, G-QRP, MI-QRP, NorCal
QRP since '73!

N9DD TMPS 1996 Qs=034 States=15 Confirmed=04 DX=03
CA CO IN KY MA MD MN NH NJ NM NY OK PA TX WA
(LZ) (VE) (EA8)

From owner-qrp-l@Lehigh.EDU Thu Jun 27 23:03:15 1996
From: "Taylor Greg" <GTAYLOR@ag-eco.tamu.edu>
Subject: [97] Re: QSK QUESTION
Message-ID: <1E6317C7493@ag-eco.tamu.edu>

> Hi Gang,
>
> Paul R. Valko wrote:
> > That is TOO funny. Different strokes... right? People like me that
> > almost REQUIRE full QSK find non-QSK rigs (ones that don't let you hear
> > between dits and dahs) completely irritating!
>
> I agree with Paul, if it ain't a QSK rig, I don't want it. I think it's
> very easy to get used to (and listen to) that "noise" between your own
> sending. That's my advice to anyone new to cw who plans to stick with it.
> Get used to the "noise". That "noise" is full of valuable information
> whether you're chasing DX or rag chewing. Is someone else calling the
> same station you are? (especially important for QRP) Is the station you
> are talking to trying to break back? Is someone interfering? Lots of
> other reasons. I even go a step further and turn down the sidetone to
> a much lower level.
>
> 72, de Art WU2K
>
Definitely agree.....and I find the way its done also makes a
difference....when I got my QRP+ was disappointed to find it uses a
relay for the "full qsk" advertised.....it just ain't the same after
30+ years with various forms of electronic switching.....

72....Greg, KD4HZ

Dr. Gregory S. Taylor !MAIL: 340b Blocker Bldg
Extension Program Leader for ! College Station, TX 77843-2124
Community Development !VOICE: 409-845-4445
Texas Agricultural Extension Service!FAX: 409-847-8744
Texas A&M University System !EMAIL: Reply or g-taylor4@tamu.edu

From owner-qrp-l@Lehigh.EDU Thu Jun 27 23:03:15 1996
From: "John D. Spittle" <jds@vcn.bc.ca>
Subject: [86] Re: Reciever Advice
Message-ID: <Pine.3.89.9606270915.A20333-0100000@opus.vcn.bc.ca>

On Thu, 27 Jun 1996, BOB ROACH wrote:

> Hello All,
>
> I would like your thoughts on recievers for a QRP station. The plan at
> this point is to use a small very low power transmitter, therefore I
> want a good reciever.....

START BY SPELLING IT "RECEIVER". THIS IS BECOMING CONTAGIOUS ON QRP-L!!
ON THE COVER THE GARDENING CATALOGUE I RECEIVED IN THIS MORNING'S MAIL WE
WERE ADVISED THAT "THE 1ST 500 CUSTOMERS WOULD RECIEVE (SIC) A FREE
SPRUCE SEEDLING". IT'S SPREADING!

..... to help take up the slack.....

IT'S THE OTHER GUY WHO FIRST NEEDS THE GOOD RECEIVER WHEN YOU ARE RUNNING
FLEA POWER.

>.....would like to have a superhet rig.....

DESPITE THE HORRIBLE THINGS BEING SAID ABOUT "SIMPLE" SUPERHET RECEIVERS
THE NE602 - XTAL FILTER - NE602 - LM386 COMBO IS CHEAP AND EFFECTIVE. I
HAVE ALWAYS BEEN ABLE TO COPY ANY STATION WHICH CAN HEAR MY SIGNAL.

.....I also have very little money to spend.....

JOIN THE CLUB!

HAVE FUN. 72//73 DERRY VE7QK

From owner-qrp-l@Lehigh.EDU Thu Jun 27 23:03:15 1996

From: Dave.Ackrill@WESTWOOD45.powergen.co.uk
Subject: [75] RE: Resonant Antennas
Message-ID: <960627141704Z*/G=Dave/S=Ackrill/O=WESTWOOD45/PRMD=POWERGEN/ADMD=CWMAIL/C=GB/@MHS>

Interesting idea, "only use resonant antennas". For instance, define an "antenna". I can put a coil together with a capacitor and it will be resonant on a particular frequency, but I wouldn't expect that, on its own, that it would radiate a strong signal over a long distance, in some cases it may be desirable that it DOESN'T radiate too much, too far!

I've been led to believe that "resonance" and "radiating effectiveness" do not necessarily go hand in hand. Yes, for efficiency and particular performance needs, resonance might be desirable, but for "us" an 'effective' radiator may be more practical.

Then there are the issues of bandwidth, Q and practicalities of putting up a dedicated antenna for each band!

My outlook is simple, if it works for you (what ever it is that you want) then it's effective. If it doesn't work as you want it to, take it down and try again!

My understanding of antenna theory is that you can get any thing that will accept RF power to radiate. Where it radiates, and how effectively or efficiently it radiates is something else. But if that is all you have then you have to make the best of it.

I suppose that the "resonant only" people would balk at the top loaded, non-resonant, antennas used on LF? I would love to be able to put up a quarter wave vertical for 73kHz (1kM high!), or even better a half wave at least a half wave above ground. But the Planning Authority might suggest that it isn't really practical to hang a 2kM long piece of wire 2kM off the ground, let alone the engineering skill and cost of such projects.

All of which I suppose begs the question as to whether using a Coil and Capacitor to 'resonate' a short, in terms of wavelength, piece of wire makes a resonant antenna? If so, then could using an ASTU to 'tune' a doublet be considered as the same arrangement?

If I were a conspiracy theorist I might suggest that the "resonant only" argument is just to try to limit the competition in the pileups, but that would be an unworthy thought, wouldn't it ;-}

Regards de Dave (G0DJA)

From owner-qrp-1@Lehigh.EDU Thu Jun 27 23:03:15 1996
From: James Bell <jim.bell@canada.cdev.com>
Subject: [67] RE: Tentec Argosy Information
Message-ID: <199606271220.IAA114602@nss2.CC.Lehigh.EDU>

I reply to your request for prices.

Currently in this part of Canada there are two Argosy stations for sale

1./ Argosy 525Digital with matching PSU ,Desk mike and voice synthesizer(?) -----\$550 Canadian (400 us)

2./ Argosy 525 Digital with matching PSU and hand mike plus extra 1.8 KHZ SSB filter and noise blanker.

-----\$550 Canadian (400 us)

Matching Antenna tuner 150 Canadian (110 us)

I hope this gives you some indication of prices (in Canada)

Shipping on either setup would probably be extra.

72 JIM VE3DDY

From owner-qrp-1@Lehigh.EDU Thu Jun 27 23:03:15 1996
From: N5EM@aol.com
Subject: [91] RE: Zero Meter Band
Message-ID: <960627141706_565361161@emout16.mail.aol.com>

In a message dated 96-06-27 12:44:40 EDT, you write:

<<

I've been thinking lately of the Internet as if it were the newest WARC band, calling it "Zero Meters" or "0m" for lack of a better term. While not grounded in science, it has a nice ring to it :)

>>

OK, folks. How many are OLD enough to remember a story in 73 magazine about "The Zero Meter Band"?

Ed, N5EM

From owner-qrp-1@Lehigh.EDU Thu Jun 27 23:03:15 1996
From: "Brian.Buydens@usask.ca" <buydens@duke.usask.ca>

Subject: [103] RE: Zero Meter Band

Message-ID: <Pine.OSF.3.94.960627133411.30498C-1000000@duke.usask.ca>

On Thu, 27 Jun 1996 N5EM@aol.com wrote:

> In a message dated 96-06-27 12:44:40 EDT, you write:

>

> <<

> I've been thinking lately of the Internet as if it were the newest WARC
> band, calling it "Zero Meters" or "0m" for lack of a better term. While
> not grounded in science, it has a nice ring to it :)

> >>

>

> OK, folks. How many are OLD enough to remember a story in 73 magazine about
> "The Zero Meter Band"?

>

> Ed, N5EM

I think of the Internet as computers connected to a transmission line and
no antenna. Does that make my computer a "dummy load" ;-) (I know, I
know ... it depends who is operating it ;-)

```
+-----+
| Brian Buydens, Computing Services, University of Saskatchewan |
| email: Brian.Buydens@usask.ca |
| VE5RDV |
+-----+
| Albert Einstein, when asked to describe radio, replied: "You see, wire |
| telegraph is a kind of a very, very long cat. You pull his tail in New |
| York and his head is meowing in Los Angeles. Do you understand this? |
| And radio operates exactly the same way: you send signals here, they |
| receive them there. The only difference is that there is no cat." |
+-----+
```